

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method for detecting the presence of auxiliary information symbols encoded onto host signals, comprising steps of:

receiving an encoded host signal;

detecting an auxiliary information carrier from said received encoded host signal, wherein said auxiliary information carrier is comprised of a plurality of signal components having varying amount of delay or offset from each other;

correlating said encoded host signal with said auxiliary information carrier to obtain a correlation value; and

detecting the presence of said auxiliary information symbols from said correlation value.

2. (Previously presented) The method according to claim 1, wherein said auxiliary information symbol detecting step comprises the step of determining a sign of said correlation value.

3. (Previously presented) The method according to claim 1, wherein said auxiliary information symbol detecting step comprises the step of determining a magnitude of said correlation.

4. (Original) The method according to claim 1, wherein said auxiliary information symbol detecting step is used for copy management purposes.

5. (Original) The method according to claim 1, wherein said auxiliary information symbol detecting step is used to limit unauthorized copying of said host signal.

6. (Original) The method according to claim 1, wherein said auxiliary information symbol detecting step is used for at least one of broadcast and playback monitoring of said host signal.

7. (Cancelled).

8. (Currently amended) ~~The method according to claim 7,~~ A method for encoding information symbols onto a host signal, comprising the steps of:

creating an auxiliary information carrier, wherein said auxiliary information carrier is comprised of a plurality of signal components having varying amounts of delay or offset from each other;

determining a value of an auxiliary information signal representing an information symbol;

calculating a value of said auxiliary information carrier corresponding to said determined value of said auxiliary information signal according to a predefined relationship between auxiliary information signal value and auxiliary information carrier;

developing a host modifying signal for modifying said host signal based upon said calculated value; and

modifying said host signal with said host modifying signal;

wherein said auxiliary information carrier comprises multiple distinct frequency bands.

9. (Original) The method according to claim 8, wherein said auxiliary information carrier comprises one or more frequency components within at least one of said frequency bands.

10. (Currently amended) ~~The method according to claim 7,~~ A method for encoding information symbols onto a host signal, comprising the steps of:

creating an auxiliary information carrier, wherein said auxiliary information carrier is comprised of a plurality of signal components having varying amounts of delay or offset from each other;

determining a value of an auxiliary information signal representing an information symbol;

calculating a value of said auxiliary information carrier corresponding to said determined value of said auxiliary information signal according to a predefined relationship between auxiliary information signal value and auxiliary information carrier;

developing a host modifying signal for modifying said host signal based upon said calculated value; and

modifying said host signal with said host modifying signal;

wherein said calculated value comprises a fixed gain value of said auxiliary information carrier.

11. (Previously presented) The method according to claim 10, wherein a polarity of said fixed gain value is determined in accordance with the value of said auxiliary information signal.

12. (Currently amended) ~~The method according to claim 7;~~ A method for encoding information symbols onto a host signal, comprising the steps of:

creating an auxiliary information carrier, wherein said auxiliary information carrier is comprised of a plurality of signal components having varying amounts of delay or offset from each other;

determining a value of an auxiliary information signal representing an information symbol;

calculating a value of said auxiliary information carrier corresponding to said determined value of said auxiliary information signal according to a predefined relationship between auxiliary information signal value and auxiliary information carrier;

developing a host modifying signal for modifying said host signal based upon said calculated value; and

modifying said host signal with said host modifying signal;

wherein said information symbols identify said host signal.

13. (Currently amended) ~~The method according to claim 7,~~ A method for encoding information symbols onto a host signal, comprising the steps of:

creating an auxiliary information carrier, wherein said auxiliary information carrier is comprised of a plurality of signal components having varying amounts of delay or offset from each other;

determining a value of an auxiliary information signal representing an information symbol;

calculating a value of said auxiliary information carrier corresponding to said determined value of said auxiliary information signal according to a predefined relationship between auxiliary information signal value and auxiliary information carrier;

developing a host modifying signal for modifying said host signal based upon said calculated value; and

modifying said host signal with said host modifying signal;

wherein said information symbols comprise copyright information associated with said host signal.

14. (Currently amended) ~~The method according to claim 7,~~ A method for encoding information symbols onto a host signal, comprising the steps of:

creating an auxiliary information carrier, wherein said auxiliary information carrier is comprised of a plurality of signal components having varying amounts of delay or offset from each other;

determining a value of an auxiliary information signal representing an information symbol;

calculating a value of said auxiliary information carrier corresponding to said determined value of said auxiliary information signal according to a predefined relationship between auxiliary information signal value and auxiliary information carrier;

developing a host modifying signal for modifying said host signal based upon said calculated value; and

modifying said host signal with said host modifying signal;

wherein said information symbols identify an attribute of said host signal.

15. (Original) The method according to claim 14, wherein said attribute comprises copy management rules associated with said host signal.

16. (Original) The method according to claim 14, wherein said attribute comprises usage control rules associated with said host signal.

17. (Original) The method according to claim 14, wherein said attribute comprises distribution control rules associated with said host signal.

18. (Currently amended) ~~The method according to claim 7,~~ A method for encoding information symbols onto a host signal, comprising the steps of:

creating an auxiliary information carrier, wherein said auxiliary information carrier is comprised of a plurality of signal components having varying amounts of delay or offset from each other;

determining a value of an auxiliary information signal representing an information symbol;

calculating a value of said auxiliary information carrier corresponding to said determined value of said auxiliary information signal according to a predefined relationship between auxiliary information signal value and auxiliary information carrier;

developing a host modifying signal for modifying said host signal based upon said calculated value; and

modifying said host signal with said host modifying signal;

wherein said host signal is stored on a physical medium subsequent to said modifying.

19. (Currently amended) ~~The method according to claim 7;~~ A method for encoding information symbols onto a host signal, comprising the steps of:

creating an auxiliary information carrier, wherein said auxiliary information carrier is comprised of a plurality of signal components having varying amounts of delay or offset from each other;

determining a value of an auxiliary information signal representing an information symbol;

calculating a value of said auxiliary information carrier corresponding to said determined value of said auxiliary information signal according to a predefined relationship between auxiliary information signal value and auxiliary information carrier;

developing a host modifying signal for modifying said host signal based upon said calculated value; and

modifying said host signal with said host modifying signal;

wherein said host signal is distributed by least one of radio wave transmission and wired transmission subsequent to said modifying.

20. (Previously presented) A method for encoding information symbols onto a host signal, comprising:

providing an information carrier signal comprising one or more features of said host signal,

determining a value of an auxiliary information signal representing an information symbol;

calculating one or more values for modifying said information carrier signal in accordance with said auxiliary information symbol;

developing a host modifying signal for modifying said host signal based upon said calculated values; and

modifying said host signal with said host modifying signal.

21. (Previously presented) The method of claim 20, wherein said features comprise at least one of filtered, masked, or shifted versions of said host signal.

22. (Previously presented) The method of claim 20, wherein said features are determined in at least one of time, frequency, or space domains.

23. (Previously presented) The method of claim 20, wherein said host modifying signal comprises a plurality of signal components having varying amounts of delay or offset from each other.

24. (Previously presented) The method of claim 23, wherein the amount of delay or offset associated with said plurality of signal components is adapted in accordance with said auxiliary information symbols.

25. (Previously presented) The method of claim 20, wherein said host modifying signal is obtained by modulating at least one of the amplitude or phase of the host signal.

26. (Previously presented) The method of claims 20, wherein said modifying step is carried out in an analog domain.

27. (Previously presented) A method for modifying a host signal to contain auxiliary information symbols, wherein said modifying comprises:

- providing an information carrier signal in accordance to one or more features of said host signal,

- determining a value of an auxiliary information signal representing an information symbol;

- generating a host modifying signal by applying a fixed gain to said information carrier signal in accordance with said auxiliary information symbol; and

applying said host modifying signal to said host signal to produce a stego signal.

28. (Previously presented) The method of claim 27, wherein said stego signal comprises at least one of a filtered, masked, or shifted version of said host signal.

29. (Previously presented) The method of claim 28, wherein said filtered, masked, or shifted version of said host signal is obtained by at least one of:

- spatial frequency filtering or masking;
- temporal frequency filtering or masking;
- spatial domain shifting; or
- temporal domain shifting.

30. (Previously presented) The method of claim 27, wherein said stego signal comprises a modulated version of said host signal.

31. (Previously presented) The method of claim 30, wherein said modulated version of said host signal is obtained by at least one of amplitude or phase modulation techniques.

32. (Previously presented) The method of claim 27, wherein said applying of said host modifying signal to said host signal produces small perturbations in said host signal.

33. (Previously presented) The method of claim 32, wherein said perturbations are imperceptible to a perceiver.

34. (Previously presented) The method of claim 27, wherein said host signal comprises a sequence of images.

35. (Previously presented) The method of claim 27, wherein said host signal comprises both a

sequence of images and an audio track.

36. (Previously presented) The method of claim 27, wherein said stego signal is stored on an optical medium.

37. (Previously presented) The method of claim 27, wherein said stego signal is stored on an electronic medium.

38. (Previously presented) The method of claim 27, wherein said stego signal is transmitted and subsequently received at a display device.